K-16 EDUCATION WORKSHOPS

College and University Faculty, K–12 Teachers, Undergraduate and Graduate Students, Informal Educators: Please join us for an exciting and diverse series of workshops and events for education at all levels. Annual Meeting registration and payment of the workshop fee are required in order to participate in the K–16 workshops. GSA K–12 Teacher Members who are only attending the workshops do not have to pay the meeting registration fee (US\$44). Annual Meeting registration is US\$44 for nonmember K–16 teachers or for others who will participate only in the weekend workshops. A special Subaru of America grant is available to Utah graduate students and two-year college faculty that will cover half of the registration fee. Please visit www.geosociety.org/meetings/2005/rSubaru.htm for information. To register on-line, please visit GSA's website at www.geosociety.org.

Saturday Workshops

1. Earthquakes—A One-Day Workshop for College and University Faculty [601]

Sat., 15 Oct., 8 a.m.–5 p.m. Cosponsored by IRIS Consortium; U.S. Geological Survey; National Science Foundation; Purdue University.

Intended audience: College and university faculty. Fee: US\$10.

This workshop will cover the following topics: causes of earthquakes, plate tectonics, propagation of seismic waves, seismographs, statistics and data, Earth's structure, and earthquake hazards. Learning activities emphasizing hands-on and inquiry-based learning will be used to deliver content to participants. Participants are encouraged to reflect on how these activities could be used in their classrooms. **Materials (hands-on activities, maps, earthquake**

book, posters, software and other teaching aids) will be provided to participants as part of the workshop. **Information:** Michael Hubenthal, hubenth@iris.edu; Larry Braile; John Lahr; John Taber; Lisa Wald.

2. Inquiry-Based Groundwater Science Instructional Materials and Curricula [602]

Sat., 15 Oct., 9 a.m.–5 p.m. Cosponsored by *Kansas Geological Survey; AGI Foundation*. **Intended audience:** Middle and high school teachers, college and university faculty, informal educators. Fee: US\$30.

Workshop attendees will be introduced to basic science concepts and inquiry-based curricular materials for use in earth and environmental science classes. Attendees will participate in demonstrations, examine AGI's curricular materials, learn about Internet resources, and play with problem-based computer software if they bring lap-top computers. All instructional and AGI curricular materials samples will be provided. **Information:** Allen Macfarlane, dowser@kgs.ku.edu; Ann Benbow, aeb@agiweb.org.

3. How to Establish and Sustain an Undergraduate Research Program [603]

Sat., 15 Oct., 1–5 p.m. Cosponsored by *Council on Undergraduate Research*.

Intended audience: College and university faculty, graduate students. Fee: US\$35.

This workshop will present strategies for developing and sustaining research programs at the undergraduate level. It is open to all but is designed for new geosciences faculty, graduate students applying for academic positions, and faculty interested in expanding their research programs to include undergraduates. Presentations will cover strategies for obtaining a job at a predominantly undergraduate institution, funding opportunities to support undergraduate

research, project selection and mentoring of undergraduates, and models of successful undergraduate research programs. **Information:** Lydia Fox, lkfox@pacific.edu.

4. Teaching Introductory Geology with Art: Sharing Effective Materials and Activities [604]

Sat., 15 Oct., 1–5 p.m. Cosponsored by *National Association of Geoscience Teachers; National Science Foundation*.

Intended audience: College and university faculty. Fee: US\$20.

The teaching of introductory geology in conjunction with art is an emerging practice at a number of universities. This interactive workshop will provide a forum for current instructors of such courses to share effective class activities and/or materials. The workshop leaders, a geologist and an art educator who team-teach an art and geology course, will facilitate. They will also disseminate information regarding and solicit participation in their educational materials development project, the goal of which is the production of an art and geology textbook. Funding may be available to cover costs associated with workshop attendance. **Information:** Denise Battles, dbattles@georgiasouthern.edu.

Sunday Workshops

US\$15.

5. Designing Effective Geoscience Education Research: Qualitative and Quantitative Methods [605]

Sun., 16 Oct., 8 a.m.–noon. Cosponsored by *Ohio University*; *National Science Foundation*. **Intended audience:** Graduate students, college and K–12 educators, and researchers. Fee:

In this workshop, participants will learn about the qualitative and quantitative data collection and analysis methods used in geoscience education research. Workshop leaders will use case studies, demonstrations, and hands-on activities to introduce participants to the variety of education research methods. This workshop is geared for students, college and K–12 educators, and researchers who are engaged in or who plan to be engaged in education research. Written materials will be handed out to augment the content in the workshop. **Information:** Julie Sexton, ju.sexton@colostate.edu; Julie Libarkin, libarkin@ohio.edu.